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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,996	10/17/2001	Hidetaka Anna	Q66764	4505

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EXAMINER

NEGRON, ISMAEL

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,996

Applicant(s)

ANMA ET AL.

Examiner

Ismael Negron

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 6-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's After-Final Amendment filed on June 5, 2004 has been entered. Claim 1 has been amended. Claims 3 and 4 have been cancelled. No claims have been added. Claims 1, 2 and 6-10 are still pending in this application, with claim 1 being independent.
2. Applicant's request for reconsideration (see Interview Summary, Paper No. 20040719) of the finality of the rejection of the last Office Action (Paper No. 20040322) is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over AIKAWA et al. (U.S. Pat. 6,435,702) in view of TEMME et al. (U.S. Pat. 6,934,635) and WILLEMS et al. (U.S. Pat. 6,194,497).

AIKAWA et al. discloses a vehicle headlamp having:

- **a light source** (as recited in claim 8), Figure 1, reference number 18;

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- **a lamp body** (as recited in claim 8), Figure 1, reference number 10;
- **the lamp body having a front opening** (as recited in claim 8), inherent;
- **a front lens covering the front opening of the lamp body** (as recited in claims 1 and 8), Figure 1, reference number 12;
- **a main reflective surface** (as recited in claim 1), Figure 1, reference number 16;
- **a extension reflector** (as recited in claim 1), Figure 1, reference number 24;
- **the extension reflector being operable to reflect light from the light source** (as recited in claim 1), inherent;
- **a front end portion of the extension reflector being disposed adjacent to the front lens** (as recited in claim 1), column 3, lines 52-54;
- **the extension reflector being provided with a metal film** (as recited in claim 1), inherent; and
- **the extension reflector being formed separate from the main reflective surface** (as recited in claim 7), Figure 1.

AIKAWA et al. teaches all the limitations of the claims, except:

- the extension reflector being made integrally with the main reflective surface (as recited in claim 6);

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- the front lens having an anti-static agent formed within the base material (as recited in claim 1);
- such front lens having an initial surface resistance of $10^{13} \Omega/\text{cm}^2$ or less (as recited in claim 1);
- the anti-static agent being 2% wt of the base material of the front lens (as recited in claim 9); and
- the extension reflector being disposed 5mm or less apart from the front lens (as recited in claim 10).

TEMME et al. discloses a vehicle headlamp having:

- **a front lens** (as recited in claim 1), Figure 1, reference number 3;
- **the front lens having a base material** (as recited in claim 1), column 2, lines 36-39;
- **the front lens also having an anti-static material coating on the base material** (as recited in claim 1), Figure 1, reference number 4;
- **the anti-static material being a surface-active agent** (as recited in claim 2), Figure 1;
- **a light source** (as recited in claim 8), Figure 1, reference number 2;
- **a lamp body** (as recited in claim 8), Figure 1, reference number 1;
- **the lamp body having a front opening** (as recited in claim 8), Figure 1; and

- **the front opening being covered by the front lens** (as recited in claim 8), Figure 1.

WILLEMS et al. discloses anti-static resin compositions having an initial surface resistance of $10^{13} \Omega/\text{cm}^2$ or less (as recited in claim 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the resin composition of WILLEMS et al. as the material of the front lens of AIKAWA et al. to obtain a front lens with increased anti-static effectiveness to reduce, or even eliminate, the problems associated with the static attraction of particles (e.g. dust) which can decrease the efficiency of the headlamp, as evidenced by TEMME et al. (column , lines) and WILLEMS et al. (column 1, lines 17-50).

Regarding the extension reflector being made integrally with the main reflective surface, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the extension reflector integrally made with the main reflective surface, since it has been held that forming in one piece an article which has previously been formed in a plurality of pieces and then put together, involve only routine skill in the art and it is devoid of an inventive step. See *Howard v. Detroit Stove Works*, 150 USPQ 164 (1863).

In addition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to obtain the claimed front lens initial surface resistance of $10^{13} \Omega/\text{cm}^2$ or lower, or making the antistatic agent 2% wt of the base material of the front lens, since it has been held that discovering an optimum value of a result effective

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variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In this case, the use of anti-static coatings to increase conductivity of a base material to prevent the accumulation of contaminants due to static charging, is old and well known in the art (as evidenced by both TEMME et al. and WILLEMS et al.). Determining the optimal values of the required conductivity to obtain minimum accumulation, and the amount of material needed to be added to the base material, was considered a result of due experimentation.

Even further, it is noted that while the specification, as filed, states that the claimed 2% wt is sufficient to obtain the necessary conductivity range, the conductivity range is a function of both the composition and nature of the anti-static agent, and the amount of agent used.

Regarding the extension reflector being disposed 5mm or less apart from the front lens (as recited in claim 10). AIKAWA et al. discloses the extension reflector 24 being located in close proximity to the front lens 12 (as seen in Figure 1). While AIKAWA et al. is silent as to the exact distance between the reflector 24 and the front lens 12 one of ordinary skill in the art at the time the invention was made would have recognized the structure disclosed by Figure 1 as meeting the claimed limitation. In addition, the applicant is advised that, where the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device. *Gardner v.*

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TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984),

Relevant Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Going Beyond Surface Resistivity (EOS/ESD Technology Europe, Spring 1990), ***Dissipative Polymer Alloys*** (Evaluation Engineering, 1999), ***An introduction to ESD*** (Compliance Engineering 1999 Annual Reference Guide), ***What is static electricity/electrostatic discharge*** (ESD Association, 1999), ***ESD Dictionary*** (Novx Corporation, 2003) and ***ANSI/ESD S541 Standard for the Protection of Electrostatic Discharge Susceptible Items*** (2003) discloses the relationship between surface resistance and anti-static properties of materials. A surface resistance of $10^{12} \Omega/\text{cm}^2$ being generally considered as the threshold for anti-static materials, with values below such threshold increasing the anti-static property of the material.

Response to Arguments

5. Applicant's arguments filed June 5, 2004 have been fully considered but they are not persuasive.

6. Regarding the Examiner's rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over AIKAWA et al. (U.S. pat. 6,435,702) in view of TEMME et al. (U.S. Pat. 6,934,635) and WILLEMS et al. (U.S. Pat. 6,194,497), the applicant argues that the

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cited reference fails to disclose all the features of the claimed invention, specifically the front lens having an initial surface resistance of $10^{13} \Omega/\text{cm}^2$ or less. The applicant further argues that the references made of record are silent as to the surface resistance being a result effective variable.

7. WILLEMS et al. provides an anti-static polymer composition, as claimed, and even testifies to the advantages of such composition for reducing, or even eliminating, the accumulation of contaminants that would otherwise reduce the transparency of certain polymers (see column 1, lines 15-22). WILLEMS et al. states the relationship between the concentration of the patented anti-static composition and the surface resistance of the final material (see Tables 1-3), the reduction of such surface resistance improving the anti-static effect (column 1, lines 14-28).

In addition, WILLEM et al. disclose various concentrations with resistance values inside the claimed range, e.g. 1.0 and 1.5% in Table 1, and 0.8% in Table 2.

As the applicant will now surely agree, WILLEMS et al. provides ample suggestion of the direct relationship between the surface resistance of a material and its anti-static properties, with a specific value of resistance being determined by the desired degree of anti-static protection.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negrón whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached at (571) 272-2378. The facsimile machine number for the Art Group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you

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have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.

Inr

July 31, 2004

A handwritten signature in black ink, appearing to read 'JAW', is positioned above the printed name and title.

JOHN ANTHONY WARD
PRIMARY EXAMINER